THE
MEDICAL AND SURGICAL REPORTER.

No. 2032. SATURDAY, FEBRUARY 15, 1896. VOL. LXXIV—No. 7

ORIGINAL ARTICLES.

PARTIAL PLACENTAL ATTACHMENT IN THE LEFT FALLOPIAN TUBE: MISCARRIAGE AT FIVE MONTHS.

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In August, 1895, I was consulted by Mrs. W——, who gave the following history: Married ten years; one living child, eight years old; two miscarriages; weight 160 pounds; appearance healthy; sleeping poorly; history of laceration of cervix uteri since birth of living child. In July she had missed her menstrual period, which at the time of consulting me was six weeks overdue, and she was complaining with the following symptoms: There was a slight, sanguinous, vaginal flow, always attended with pain in the abdomen, with faintness, and with intense nausea, especially in the morning. Upon vaginal examination, I found an enlargement of the left tube and cornu. At this time I was apprehensive of tubal pregnancy. As the os was lacerated, I could not depend upon its condition as much as I otherwise would, for symptoms of pregnancy.

About the middle of August, the patient went to Atlantic City without consulting me. While at the seashore she had frequent attacks of nausea and faintness, always accompanied by acute pain. These attacks would last for a few hours, then clearing up to recur, possibly, the day following, or, surely, within two or three days. This condition continued for two weeks. Then the flow disappeared and was not seen until the early part of November, the patient suffering, however, pain in the abdomen, and nausea and faintness, during this entire period.

Mrs. W—— consulted me upon her return from the shore; I again examined her *per vaginam*, and found the left tubal mass markedly larger; quite tender; irregular, and rather soft. The uterus was increased in size, the os giving undoubted signs of pregnancy. I, at this time, gave my opinion that she was pregnant, and I requested her to return in ten days or two weeks. When she again called upon me, I informed her positively that she was pregnant, and at the same time suggested the probability of its being extra-uterine. The patient left my office very much displeased with my diagnosis of her case, as she was determined such should not be.

Subsequently one of her knowing friends gave her the comforting assurance that the doctor did not know what

he was talking about, and advised her to make a change of physicians, which she at once did. She consulted Dr. —, who gave her the information desired that she was not pregnant, and that her former doctor had made one grand mistake. To back up his opinion, he said: "I will introduce the sound to show you how positive I am." This he proceeded to do. On withdrawing it, he showed to her husband the blood-stained instrument (which, he said, he had introduced to the depth of five inches), and remarked that the uterus was filled with clotted blood (!)

A few days thereafter I called upon my patient to learn how she was feeling, and I was struck with her dignity and coldness. She said, "I am very well; never felt better in my life." She was very much provoked with me for making such a mistake in her case. (Afterwards she admitted to me that she had said she would never have me in the house again.) She also said, to use her own expression, that she "had come on perfectly regularly." I, of course, was amazed, and admitted that if it was perfectly natural, I supposed I had made a mistake. But I informed her that, while I did not wish to discourage her, I still was of the opinion that she was pregnant. This was the beginning of the end. One week later I was sent for in haste, and found Mrs. W. in labor.

The whole history being that of an abnormal case, and the patient not being in any danger, I considered it safer not immediately to resort to decided measures, but to watch the case closely, holding myself ready for any surgical procedure which, in the progress of the case, might prove necessary.

Within four days after the beginning of the miscarriage, the fœtus was expelled. This was normally developed so far as the hips, trunk, arms and head were concerned, but the legs were too small and showed evidence of constriction. The placenta remained to be delivered, and upon making the effort to do this I failed. Vaginal examination disclosed the mass still existing in the tube and cornu, but smaller than before the delivery of the child. The temperature was normal, and as nothing demanded immediate action, I concluded to await developments. This I did some days. All this time the lochial discharge was normal. At the end of eight days, the patient showing some symptoms of absorbtion with a slight rise of temperature, I decided upon the removal of the secundines *per viam naturalis*, if possible; or, if necessary, by abdominal incision. I anæsthetized the patient, and upon dilating the os and introducing the finger, I found the following peculiar conditions:

Drawing the uterus down, and passing the finger far up, the placental mass could be felt presenting through a constricted opening on the left side. By careful manipulation I was finally enabled to enucleate the larger portion of the mass, which slipped down through my hand and was carried out from the uterine cavity. The curette was used very gently, because I felt but little instrumental interference would be tolerated on account of the abnormal fœtal envelope. The removal of the placental mass was followed by a hemorrhage, for a short time terrible, and which blanched the patient.

Bimanual examination the day following showed very marked decrease of the tubal enlargement. Small portions of placental detritus, attended by an offensive discharge, were passed for a long time thereafter. Notwithstanding, and with the use of strictest aseptic toilet, the patient made an uneventful recovery.

The points in the case that caused anxiety were, the evident uterine impregnation; the tubal symptoms of sharp pain, attended by nausea and faintness; and the enlarged tube involving the cornu. I examined the patient a few weeks since and found the tube normal and the uterus healthy.

An excellent cement for cycle tires is made of bisulphide of carbon, 160 parts; guttapercha, 20 parts; caoutchouc, 40 parts; isinglass, 10 parts. This cement is dropped into the crevices after they have been properly cleaned. If the rent is very big, apply the cement in layers. Bind up the rubber tightly with thread, let dry for 24 to 36 hours, cut off the thread, and remove the protruding cement with a sharp knife, which must previously have been dipped in water.—*Leitschrift.*

MODERN OBSTETRIC TEACHING.

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After reading a certain elaborate article on "antiseptic midwifery," one can hardly resist characterizing it by a disagreeable epithet. As a countryman said of a very elaborate crematory, "It adds a new terror to death," so this gives a new dread to the perils of childbirth. Probably it was written by one who had just begun on the first of his first thousand cases, and who, if he has common sense, will discard his nonsense before he gets far into his series.

Antiseptics have wrought a revolution in surgery, and, in a reasonable amount, are good in other places. Cleanliness has ever been a cardinal virtue, but pads, douches, and disinfectants in endless number, come under the ban of the old master, "Meddlesome midwifery."

I have been in practice a long time, and I may be behind the times, but I have passed my thousand point and have not lost three patients from septic fever. Such cases have never happened with me. A few women have died from exhaustion, and from complications with existing diseases, but even those cases have been few. My experience is not better than that of my neighbors who have been long in the practice, and who have brought judgment and skill to the work. Child-bearing is a natural act; in most cases is accomplished without much outside interference, and with ordinary care, nature so provides that recovery follows with little assistance.

A practitioner enters to an obstetric case clean. He makes clean his hands, and does not neglect to clean his nails. His garments are cleaner than they need be for a drawing-room. The bed and the surroundings should be clean, although, in many cases, this is attainable only in degree. The first examination ascertains the condition and the progress of the labor. There is a flow of mucus for lubrication and for protection. There is no need of a pad to keep out "flies" or microbes, the passage closes itself. Examination may be made often and without fear, to ascertain the progress, or to satisfy the patient that something is being done for her. The perineum is supported, and care is taken to prevent lacerations. The child is born; the after-birth comes away with a few pains and a little manipulation. If gentle traction on the cord is not sufficient, the physician tries Crede's method and external pressure. If not enough, he introduces the fingers, clutches the edge of the placenta and brings it down. If there be adhesions or irregular contractions, he introduces the whole hand and takes away the secundines, being certain that no part is left. In nine cases out of ten, nothing more is done, and recovery follows more quickly than where douches or injections are used. In many cases these obstruct rather than aid the natural process.

Use sterilized water or antiseptic washes for the outside toilet, and require clean clothes and fresh linen so far as possible. Recovery follows in the majority of cases, even when no precautions have been used.

Injections after labor has commenced, remove the secretions which nature provides for lubrication and for protection, and may do the same if used postpartem. Putrescent matter must be kept from the outside parts, and, if formed within, must be washed away. This occurs in few cases.

Surgeons of modern times have demonstrated that, as has long been known, a wound "done up in the blood" is in the best of antiseptic dressings. So the uterus, after its contents are removed and the clots have come away, is in condition that resists infection, and heals, or is restored, by first intention as does a well-treated wound. Even when labor has been difficult; when instruments have been used and bruises and lacerations left; or where turning has been resorted to; even then recovery takes place almost as quickly as in other cases.

Many of us are cognizant to a certainty that, in every community, there is a large number of cases where the gravid womb is tampered with—punched with sounds or bougies, or inflated, or injected—until the fœtus comes away. The placenta, often, remains some time before it is thrown off. Yet, in these cases we are seldom called and accidents are few. Septicemia seldom or never supervenes. It is possible, but it is infrequent owing to the protective power of nature.

I am old in practice and, perhaps, am too conservative, but I accept experience and observation as against new-fangled theories. Obstetrics is the bug-bear of medical students, who approach a case with fear and trembling which modern teaching adds to, rather than diminishes. He may have this consolation; the percentage of deaths in child-birth, even in the crudest times, is far below that of surgical operations by the strictest antiseptic methods; and one-third of the cases throughout the country are yet attended, and successfully, by uneducated mid-wives. This is no justification for the lack of education, but rather is mentioned as a set-off for *over-education.* Time was when this branch was given entirely over to old women, and the medical student had a few lectures on the subject from the professor of anatomy as the quota of importance it demanded in the course. Things are much better now, but they would seem to have gone too far the other way.

TEA AND COFFEE.

Coffee, the drink more highly regarded to-day by the entire civilized world than any other, is the berry from several species of the genus *Coffea*, of which *C. Arabica* is the chief. The first use of this berry was in Abyssinia, where it was known A.D. 875. Thence it was brought to Arabia in the beginning of the fifteenth century. There both its use and the cultivation of the plant spread with great rapidity, and for two centuries that country furnished the supply of the world. In the middle of the sixteenth century coffee-houses were established in Constantinople, for the purpose of affording the common people greater facilities for obtaining the drink. In 1652 it made its first appearance in Great Britain, through the opening of a coffee-house in London by a Greek, Pasqua Rossie, who thus immortalized himself more simply than has ever any other man. But its fame had reached England before that, for Bacon wrote, "They have in Turkey a drink called coffee. . . . This drink comforteth the brain and heart, and helpeth digestion."

Tea, which more than any other competitor might dispute with coffee the claim to universality as a drink, is a native of China, where it has been cultivated for at least a thousand years. The commercial article is the prepared leaf of the shrub *Thea Chinensis;* and, while there are many colors, varieties, and flavors known to the market, all are the product of the same plant, the varieties depending on the treatment after the leaves are gathered. The cultivation of tea has been extended into Japan and throughout the tropics to Java, Australia, Natal, and Brazil.

According to Chinese tradition, the virtues of tea were discovered by the Emperor Chinnung, 2737 years B. C. Knowledge of it was carried to Japan, and it was there cultivated in the thirteenth century, but we do not find it in use in England until some four hundred years later. Pepys mentions having drunk it for the first time in 1660, showing that it was then a novelty. But its use must have spread rapidly, for in 1678 it appears to have been in general use.—*Lippincott's.*

Prof. H. Marshall Ward says that it is only the blue and violet rays of sunlight which kill bacteria. These rays are dimmed or filtered out by passing through common glass, and quartz had to be used in the experiments to obtain a very pure spectrum.

THE ENDOMETRITÈS.*

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The patient that I show you to-day is a woman of thirty-four and the mother of three children, and has never miscarried.

Her last labor, about ten months ago, was terminated by the forceps, and since this time the patient has complained of the symptoms for which she comes to-day to obtain relief.

The most prominent symptoms are severe pain in the lumbar region and an excessive leucorrhœa. Anorexia is almost complete, and sometimes there is nausea after meals. The bowels are constipated.

There are no bladder symptoms and the urine is normal.

The external genitals are in perfect condition. By vaginal examination the cervix is found to be very large, with a left-sided complete laceration. Around the external orifice you will see, per speculum, a number of small ulcerations.

The uterus is retroverted, but quite movable, while the adnexa appear in good condition.

We have to do here with a typical case of endometritis, due in all probability to the laceration in the cervix. You will be called upon very often in practice to treat such cases, and you must be familiar with their pathology and treatment.

Endometritis is the inflammation of the uterine mucosa, and may be either acute or chronic.

You must know that all the metrites begin by an inflammation of the endometrium and that the fundamental character of this inflammation is usually to become localized in the mucosa, thus forming the predominating lesion.

The endometrium, instead of being smooth, white and resistant as when healthy, becomes irregular, swollen, soft, pulpy, and takes on the aspect and consistence of currant jelly.

In the acute stage there are ecchymoses, which give to the mucosa a darker color, and its thickness may attain 15 millimetres in certain pathological conditions. The surface of the endometrium is covered by depressions and bosses, for which reason various terms, such as villous, polypous, vegetating, or fungous metritis have been given.

In the cervical endometrium you will find small cysts having a thick mucous or gelatinous contents. Similar small cysts of the same origin, but containing a substance more liquid and serous, are to be found in the endometrium of the corpus uteri.

Microscopically, you can divide endometritis into three types, viz.: *glandular*, *interstitial* and *mixed*.

The *glandular type* is characterized by an increase in length and breadth of the glands, which become bent and tortuous. Under the microscope the pathological glandular tissue will be found to only slightly differ in structure from the normal.

The cells swell and proliferate in inflammation to such an extent as to resemble those of the decidua. In some cases the cells, instead of being pressed against one another, are separated by an intercellular substance having a granular aspect. The vessels of the deeper parts of the mucosa are dilated and in a state of congestion.

In *interstitial endometritis*, instead of round or oval cells crowded together or separated by a soft connective tissue, they are fusiform and separated by an abundance of hard, fibrous connective. The glands thus pressed upon will sometimes atrophy, and in the advanced cases have disappeared completely.

The epithelial cells shed their vibratile ciliæ, become irregular, flat, or cubic, and are to be distinguished from the pavimentous epithelium by their irregular arrangement. In some spots the cells are wanting, and here you will find a real ulcerative process going on.

The mucosa has disappeared around

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these ulcerations, and it is substituted by a fibrous membrane incompletely lined by a layer of cells.

The *mixed endometritis* is characterized by a diseased condition of both the glandular and interstitial connective tissues of the endometrium.

The principal forms of endometritis may be divided into five, viz.:—

Acute endometritis.
Catarrhal endometritis.
Hemorrhagic endometritis.
Exfoliative endometritis.
Fungous endometritis.

In the *acute endometritis* the epithelial cells undergo a marked change; the glands do not increase in number, the inflammatory processus being particularly interstitial. The mucosa is swollen and in a state of hyperemia, often presenting ecchymotic foci, due to rupture of the dilated capillaries.

An intense infiltration of white corpuscles is to be seen in the stroma. When the processus is very acute, the muscular tissue becomes odematous and congested.

In the very septic forms the superficial muscular layer undergoes necrosis.

In the *catarrhal endometritis* many of the cells become caliciform and secrete a very profuse exudation.

Hemorrhagic endometritis, pathologically considered, is a mixed or interstitial endometritis, with lesions predominating in the stroma, while a great vascular proliferation is present. You can consequently explain the cause of the hemorrhages in this form by the great number of neo-vessels, which are dilated and near the surface of the mucosa.

In exfoliative endometritis, also called membranous dysmenorrhœa, the endometrium is thickened, the cylindric epithelium is usually destroyed, and the migratory cells invade the stroma of the mucosa. Real hemorrhages occur in the substance of the endometrium, separating the superficial from the deeper parts, with the resulting elimination *en masse* of the uterine mucosa.

The mucosa may reach as much as 15 millimetres in *fungous endometritis*. This type of inflammation was first described by Récamier, and later by Olshausen, under the name of *chronic hyperplastic endometritis*, and is a mixed endometritis with a predominance of glandular tissue change.

As to the changes in cervical metritis, I may say that they are exactly the same as those of the corpus, only the extreme frequence of cystic formation, and the more frequent occurrence of inflammation of the muscular parenchyma, gives a particular physiomony to cervical endometritis.

The cystic degeneration may produce a considerable hypertrophy of the cervix, which is very frequently the seat of erosions or ulcerations.

The ulcerations are often more apparent than real, and consist of an ectropion of the endo-cervical mucosa. This ectropion may or not be accompanied by an eversion of the underlying muscular tissue; this is more often the case after laceration of the cervix, as has been pointed out by Emmet.

Around the cervix you will often see granulations, vascular villosities, sometimes small mucous polypi, which give rise to quite severe hemorrhage. These polypi have the shape of a cat's tongue, are reddish in color, with a smooth or uneven surface, and many grow to such an extent that they protrude from the vagina.

There is also a *senile endometritis*, characterized by sclerosis of the inter-glandular stroma, atrophy of the glands, pavimentous change of the epithelium or its disappearance in places where ulcerations form, and which may give rise to quite severe hemorrhages.

The induration of the tissues, to which is added the hemorrhagic ulcerations which are sometimes slightly fissured, might lead you to believe that such a case was the beginning of an epithelioma. The diagnosis is in reality very difficult, especially in the fœtid form.

I have now considered the inflammation of the endometrium and the various pathological changes observed in the different endometritès; let me now call your attention to the changes that occur in the muscular tissue of the uterus in these inflammatory processes.

The lesions are slight in the acute forms. Occasionally the muscular wall is the seat of an embryonic infiltration and has an odematous appearance.

Zweifel and Doderlein found bacteria in the septic forms, not only in the culs-de-sac of the glands but in the intersti-

tial tissue, down to the spaces separating the muscular fibres as well. Sometimes small disseminated purulent foci are present.

In some cases, although they are rare, the parenchymatous tissue undergoes necrosis, as, for example, in severe puerperal metritis.

As to the inflammation of the parenchymatous tissue, I may say that it never goes as far as suppuration.

Parenchymatous metritis is characterized by an increase in size of the uterine cavity and thickness of the muscular walls of the organ. In such patients the uterine cavity may measure as much as from nine to twelve centimetres by the sound. This increase in thickness is due to the inflammatory œdema with infiltration of the cellular elements, sometimes with atrophy of the muscular fibres.

This is not a true hypertrophy, because all the elements of the parenchyma do not take part in the change, the conjunctive tissue being the seat of the lesions. This tissue is more abundant and contains migratory cells. The centre of the sclerosis appears to be around the blood-vessels.

It is most infrequent to find the adnexa healthy either in the acute or chronic forms of endometritis. The ways of transmission are multiple. For a long time the inflammatory infiltrations were supposed to reside in the peri-uterine conjunctive tissue. Emmet attributed a large part to pelvic cellulitis. To-day, I think that the teachings of Bernutz are more generally accepted, and it is admitted that the infection travels by the endometrium, extending to the tubes, ovaries and peritoneum, producing catarrhal or purulent salpingitis, while at the ovary and peritoneum it causes adhesions, plastic or purulent exudation or pelvic abscess.

You will often find extensive thick, false membranes, binding down the adnexa to the uterus, the pelvic walls, or extending to the mesentery and matting together the intestinal coils. From these various conditions retroversion or flexion or latero-flexion results.

Douglas' cul-de-sac is filled by exudations which, in some cases, exercise a dangerous compression on the rectum, so much so as to produce an intestinal occlusion, as also happens when the small intestine is bent upon itself and held so by the adhesions.

I also believe that the lymphatics play a part in these infections, especially in puerperal endometritis, as the studies of Lucas-Championniere have demonstrated. The lymphatics also may play a part in chronic endometritis, as the cases of Frélat, Munde, Courty and others show without a doubt.

The symptoms of the different forms of endometritis are to be divided into two classes, viz.: those that are common to all endometritis, and those particular to each variety.

The common symptoms are as follows: Persistent, heavy pains, which are increased by fatigue, etc., are complained of in the lumbar region, sides, hypogastrium or iliac fossæ. Micturition becomes painful and frequent, while constipation is the rule.

Then, after a time, the patients will complain of dyspepsia, hypochondria, neuroses, neuralgia, and, what I wish to particularly call your attention, a little hacking cough, what I term the *uterine cough*, without there being any lung lesion.

Then you have the patient's face to consider, and I can assure you it means much. It is often yellow, a chloroanemic color; sometimes the skin presents brownish spots and a dark circle surrounds the eyes.

Leucorrhœa, metrorrhagia, dysmenorrhœa and other menstrual troubles complete the picture common to affections of the internal genitalia.

Acute endometritis is ushered in by chills, fever, vomiting or nausea. The patient experiences rather sharp pain in the genital system, uterine colic. This pain radiates down the thighs and lumbar region, and is increased by standing, walking, palpation and vaginal examination. Often you will have rectal or vesical tenesmus. The menses stop only to reappear in greater quantity.

After two or three days a discharge appears, which is first mucous, later muco-purulent.

By bi-manual examination the uterus will be found enlarged, the corpus very round and tender to pressure.

Catarrhal endometritis first shows its presence by a more or less viscid,

whitish, yellowish abundant leucorrhœa. The sacral pains are not severe. The cervix is hypertrophied, giving rise to feelings of weight and tension.

The consistence of the cervix is diminished, its color is a more or less dark red, while the external orifice allows the escape of large muco-purulent drops, which are with difficulty removed by the tampon. Ulcerations of the cervix are very common in this form of endometritis,

Nervous troubles, such as dyspepsia, palpitation, etc., are frequent.

Hemorrhagic endometritis is characterized by a flow of blood, occurring usually without colic, by lumbar pains and various neuralgic points.

This form of endometritis is met with at the time of the menses in young girls, at the menopause, but especially after miscarriage. It is also in this and the catarrhal forms that the mucosa is fungous, polypous, with mucous polypi and follicular hypertrophy of the cervix.

Puerperal endometritis has all the symptoms of the acute form. The only particularity to be noted is the fœtid lochia, on which symptoms you base your diagnosis, only appears at the *end of twenty-four hours at the very earliest after the temperature has gone up.*

Gonorrheal endometritis is at first localized in the cervix. In the acute stage it sets up a very abundant muco-purulent discharge. Bright red erosions, which are probably real in all cases in which there is not a mixed puerpero-gonorrheal infection, are to be noted.

To make your diagnosis, you must search for other manifestations of the infection in the vulva, vagina and urethra. When these are wanting, the husband should be examined, because, as I have told you,* an old chronic posterior urethritis in the male is capable of producing an acute infection in the female.

Tubercular endometritis may be suspected by the presence of a thick, gummous discharge, with amenorrhœa, sterility, bad general condition, and especially the existence of tubercles in some other viscus.

All the endometritès are *infectious*, produced by bacteria. Schroeder was the first to emit this opinion and considered gonorrheal infection as one of the principal factors of chronic and acute endometritis.

We all know what an important part Weisser's organism plays in the etiology of the inflammation of the uterine mucosa.

The normal vagina and cavity of the cervix uteri contain pus-producing bacteria and are a dangerous region for the cavity of the organ. You can readily understand how easy it is for these organisms to penetrate the uterine cavity by coitus, etc., or directly carried in by an unclean sound or a dirty finger, and set up an endometritis.

At each menstrual period, labor, or miscarriage, a partial or total elimination of the mucosa takes place, and these pathogenic agents take advantage of the absence of this protective membrane to become lodged in the uterus.

It is an established fact that in septic endometritis the inflammatory accidents are due to the rapid proliferation of pathogenic bacteria. Septic infection is usually due to Rosenbach's streptococcus pyogenes. The staphylococcus aureus and albus appear to take part more infrequently, as a primary factor; however, Brumm has met with them in pure cultures in some slight puerperal infections.

Another organism which I believe may cause septic endometritis in a mild degree is the bacterium coli, and in two cases I obtained a pure culture of this organism from patients suffering from this affection.

Remember that the virulence of the staphylococci, the habitants of the vagina, may be lighted up by secondary causes, as traumatism, debility, venereal excess and certain eruptive fevers.

The saprophytes must also be taken into consideration, for they are only waiting for an invasion when a modification of the media takes place, and when once some virulent organism opens the way to them they add greatly in rendering the situation complicated.

As I have already stated, Schroeder was the first to uphold the microbic origin of endometritis. Pozzi is also of this opinion, and bases his belief on the works of Pasteur, Goenner and Straus.

Pasteur, that great man, discovered a

*Clinical lecture on "The Treatment of Gonorrheal Infections in the Female," *Annals of Gynecology and Pædiatry*, June, 1895.

large number of bacteria in the lochia of sick women, while they were absent in those that were healthy.

In 1887 Goenner, of Bâle, discovered streptococci in cases of puerperal septicemia.

In 1888 Doderlein, with all aseptic precautions, took the lochia in the uterine cavity of women who had just been delivered, and demonstrated that when, after labor, the temperature never went above 38° C., the liquid taken in this cavity was free from bacteria, while cocci and bacilli were found in great numbers in cases of hyperthermy.

As I have remarked, the vagina and cervix uteri contain the streptococcus, staphylococcus and various bacteria even when normal. These inhabitants of the female genital tract lose their virulence, but you must not forget that this virulence may return suddenly under favorable circumstances.

The staphylococcus, pyogenes aurens and albus has been positively proven to be the factor in the production of puerperal septicemia, erysipelas and abscess.

The existence of staphylococci and streptococci around about us in the rooms, air, etc., and Weisser's organism, which is usually exogenous, explain, by their penetration into the uterine cavity, the process of hetero-infection.

The prophylactic treatment of endometritis consists in a most rigid asepsis during labor or when making a gynecological examination. Lacerations of the cervix or perineum should be looked for after labor and immediately repaired if they exist; curettement, followed by intra-uterine irrigations should be performed if the temperature rises or if there remain any placental debris in the utero.

All suspicious discharges, due, for example, to a vulvo-vaginitis or bartholinitis, should be removed by *treating the cause.*

When you are in the presence of a puerperal metrititis, do not hesitate, but curette at once, after which a good irrigation with eucaline or creoline should be practiced and the cavity of the uterus packed with sterile iodoform gauze wetted with a solution of creosote in glycerine.

At the same time, treat the symptoms of intoxication by salicylic acid or antipyrine. The bowels must be kept open by some mild but sure purgative. I often prescribe the following:—

℞

Pulv. jalap	10.0
Pulv. rhei,	
Oleosaccharum. limonis	āā 5.0
Kalii bitartrat.,	
Sulphur præcip.	āā 20.0

M. D. S. Take an even teaspoonful, mixed in a little water, once daily.

Gonorrheal endometritis, if seen before the third or fourth day, is, I think, best treated by irrigations of potassium permanganate, 1 in 2000 or 3000. But later this antiseptic has less action over the affection, for the reason that there is already *a mixed infection.*

When a patient with this affection is seen some days after it has developed, I think it advisable to curette, if the adnexa are not invaded by the processus, and drain with iodoform or europhene gauze. But if the infection has already spread to the tubes, order hot water vaginal douches twice daily, and if very acute, apply three or four good leeches each side of the abdomen over the tubes.

Generally considered, the chronic forms of endometritis are treated either by cauterization or by curettement, the object to be attained being to destroy all the diseased mucosa *under the strictest asepsis.*

Gentlemen, *treat all cases of endometritis in order to avoid the complications* which will sooner or later occur.

As to cauterization of the uterine mucosa, I have nothing to say, as I believe that it is most dangerous, to say nothing more. Stenosis or atresia have often occurred after these treatments by caustics, necessitating grave surgical operations for their relief.

From what I have seen, I unhesitatingly profess that a *careful and aseptic curettement is the proper treatment to apply to all forms of complicated and uncomplicated endometritis,* if you will bear in mind the following indications and contra-indications:—

Indications are: In serious lesions of the cervix the curettement should be completed by a Schroeder's operation; curettement followed by drainage is indicated in endometritis complicated by slight catarrhal salpingitis; in slight cases of diffused peri-uterine inflamma-

tion this operation will be the one of choice, especially so if the peri-uterine lesions are kept up or aggravated by an inflammatory condition of the endometrium.

The contra-indications are: Well-established pathological changes in the adnexa and chronic peri-uterine inflammation.

I have endeavored in this lecture to give you an outline only of the pathology, symptoms and treatment of the endometrites. The subject is vast, and during this winter we will have occasion to discuss together the various cases that present themselves for treatment, as it is only by your clinical knowledge that you will gain the attainments of sagacious and skillful practitioners.

COMMUNICATIONS.

PERTUSSIS.*

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According to certain writers pertussis was brought into Europe from Africa, in the thirteenth century. It would seem, however, that the ancients were by no means unacquainted with this remarkable disease. Hippocrates, in the 6th book on epidemics, and also in the 6th section of his aphorisms, speaks of a cough which, from the short description he gives of it may be regarded as the same affection that is now known under the name "Pertussis."

The first distinct and comprehensive account we have of the disease was furnished by Maezsay in the year 1414 in his chronological history of France. Since that period numerous circumstantial records of its occurrence in epidemics have been published and its nature and treatment have been discussed in not a few elaborate monographs.

Accepting the above as a brief history of pertussis, and believing you all acquainted with the symptoms, I will outline the speculative bacteriology, autopsic phenomena and treatment according to Taylor, Loomis, Osler and others. The nature of the disease is still obscure and it has been regarded as a purely nervous affection, and due to pressure on the vagus by swollen tracheal or bronchial glands, but it obviously has very close similarities with the other zymotic diseases, and is distinctly contagious; generally requiring intimate contact, but sometimes apparently conveyed by clothing. It has a period of incubation of about ten days; it is protective against a repetition of the disease even more so perhaps than the exanthemata. From our present point of view, then, it would seem highly probable that it was due to a microörganism, and Afanasuff has described a bacillus which he finds in the respiratory mucous membrane and which has been found by another Russian physician in the sputum. The irritation of nerve terminals will explain the cough. It is not so easy to find a cause for the closure of the glottis which produces the whoop. It is generally thought to be spasmodic, but Goodhart suggests that it is only a passive approximation of the cords, or a failure to open freely when the sudden inspiration takes place. But by others, Eberle and W. R. Smith, they state as other speculatives that in the infinite combinations of which the material elements of the universe are capable, agents may have been evolved by a peculiar concurrence of circumstances, which had the power of creating these affections in the human system. These are the only plausible explanations that can be given unless indeed we choose to refer them directly to the will of the Creator or their immediate cause. Various, and often contradictory, are the appearances discovered on post-mortem examination. This might naturally be expected when it is considered how

*Read before Med. Soc. of N. C., 1895.

diversed are the afflictions adventitious to this complaint, and at what different period of the disease death takes place. We cannot, for example, anticipate the same post-mortem appearances in a case terminating fatally in consequence of pneumonia as in one where death results from apoplexy. Nor is it reasonable to presume there should be much uniformity where the immediate cause of death is so various or dependent on so great a diversity of incidental disorders. The respiratory organs being the parts most obviously implicated in pertussis, pathologists have of course sought an explanation of the nature of the disease, especially in the autopsic phenomena they exhibit. Traces of inflammation, in the mucous membrane of the bronchia and larynx have been frequently discovered and particularly described by many eminent writers. In one of these a considerable quantity of pus was discovered in the air passages, the smaller branches of which were in a state of most intense inflammation, approaching in some parts to gangrene. In some instances no traces whatsoever of bronchitis have been discoverable; but the lungs have been found exceedingly congested and the air-cells choked up with an extremely viscid mucus.

Various other appearances have at different times been observed, such as pleuritic adhesions, tubercles in various stages of development, enlargement and scrofulous degeneration of the bronchial glands, etc.

Sometimes the respiratory organs may be entirely unaffected in their structure, exhibiting not the minutest trace of any disease whatever, whilst the brain presents various striking marks of the previous existence of severe cerebral derangement.

In a case related by Dr. Webster, of London, the following appearances were observed on post-mortem examination: both hemispheres were extremely vascular, and the convolutions were so pressed together as almost to disappear. A good deal of serious effusion was visible under the piamater, particularly at the anterior and upper part of the brain, where a few spots of coagulable lymph were seen, and the membrane itself was injected with blood. The hemispheres slightly cohered anteriorly; the ventricles contained about two ounces of serum, and in the sheath of the medulla oblongata nearly half an ounce of fluid was discovered.

After all, it is incontestible that in many cases of death from pertussis, no morbid appearances whatever have been detected on dissection; and there are many reasons for believing that the inflammation and other phenomena, so frequently observable on post-mortem examination, have no essential connection with the disease, but are altogether adventitious or secondary.

As the complications are chiefly broncho-pneumonia with injected laryngeal tracheal mucous membrane and swollen bronchial glands, the child should be kept in a warm but well-ventilated room, but confined to bed is not necessary in an uncomplicated case. A variety of drugs have been used to check the paroxysm of pertussis, but without any very gratifying success in most cases. Belladonna is much used in the form of tincture, of which 2 or 3 minims may be given to a child two years old, three times a day, and larger doses to older children. The dose may be cautiously increased up to 10 or 15 minims in a child of five or six.

Hydrocyanic acid, chloral, potassium bromide, hydrobromic acid and antipyrin are often used. The various antiseptic inhalations have been lately employed; the cases at the Evelina Hospital were treated by impregnation of the air of the ward with carbolic acid, with no striking result. Recently, (Mohn, F. E. Manby) good results have been got by burning sulphur in the rooms inhabited by the child. An amount equivalent to 10 grains per cubic foot is burnt in the empty room; after five hours the doors and windows are thrown open and the child sleeps there the same evening. The day nursery is similarly fumigated during the night.

For obstinate cases of cough after subsidence of the whoop, alum internally is of great value (2 to 5 grains), or change of air to the seaside.

The complications must be treated much as they would be apart from pertussis. For extensive bronchitis or broncho-pneumonia, the steam-tent, cotton wool jacket, or linseed-meal poultices, with carbonate of ammonia, impecacuanha, quinine and antifebrin form the best method of treatment.

AN OBSTETRIC RESOURCE AND NECESSITY.*

J. R. IRWIN, M. D., CHARLOTTE, N. C.

In 1893 I contributed an article to *The Charlotte Medical Journal*, on rectal injections in obstetrical cases, and, after a still more extended use, I am more than ever convinced of their utility and necessity in such cases.

While parturition is a natural process, yet, in civilized life, the woman needs some assistance, and every attention that will contribute to her comfort, facilitate labor and assist to effect the safe conduct of the parturient woman, is one of the great objects of medical practice and the obstetric art. And although labor is a natural process, it is safe to regard every parturient woman exposed to dangers and complications which may imperil her safety.

From the casual way in which enemata are recommended by authors and writers on obstetrical matters, suggesting their employment only "in case the bowels have not acted," we would naturally infer that they are of little consequence. If the practitioner relies upon what the patient says in regard to condition of her bowels, he will rarely meet with an indication for their use, for she almost invariably says that her bowels have acted previous to or since the beginning of labor. Perhaps this may be correct, but few women, during the last weeks of pregnancy, escape from an accumulation of fecal matter, which, in some instances, is enormous, and what they call regular action may be a very imperfect removal of the contents of the bowels. Therefore most women need them to relieve this condition, and rectal injections should be one of a series of attentions that the physician should give his patient. By so doing he not only relieves a mechanical impediment to the process of labor, but he prevents the involuntary defecation that so often takes place with the last expulsive pains, to the mortification of the patient and utter disgust of the physician.

Another advantage to be secured by a thorough evacuation of the contents of the bowels is, wounds of the fourchette or slight perineal lacerations are not contaminated with fecal matter, and subsequent infection from this source is avoided. Recently I read in one of the medical journals an account of a case of peritonitis which began as an endometritis, caused by the presence of the bacterium coli commune, the inflammation extending through the intermuscular connective tissue of the uterus to the parametric tissue, and thence to the peritoneum. Hence another indication for the thorough evacuation and cleansing of the bowel. Of course the genitalia should be bathed with an antiseptic solution after each movement from the bowels.

One point should be emphasized. When a woman passes through parturition with accumulations in her bowels and enters the puerperal state with a distended intestinal canal, the bowels continue sluggish. In some instances, I have no doubt that the retained feces produce an intestinal irritation which may be continued to the serous coat, and may assume the proportions of peritoneal irritation, and even that of acute peritonitis.

All have noticed the tardiness with which even slight wounds heal if the excretory processes are not going on freely. A mere scratch, abrasion, or sore will be several days healing under such circumstances, and because of an altered state of the blood, consequent upon constipation, and it is a well-known fact that constipation may derange some of the most important organic actions. The circulation of azotized matter, nitrogenous waste, excretory substances, which hepatic and intestinal activity should eliminate, makes the earlier steps of digestion impossible. Improvement after purgatives illustrates the dependence of all the functional activities of the body on the prompt removal of accumulated excretory matter. These patients, if not already suffering from indigestion,

* Read before the North Carolina Med. Soc., 1895.

are in a condition to suffer from its effects, and indigestion does not mean alone the defects in gastric and intestinal reduction of food, but also the perversions of absorption, assimilation and excretion, with the morbid states they create, and are causes of not only functional disorders, but secondary pathological changes in various parts of the body. And the toxines of the blood may render the uterus and appendages more vulnerable to germs which may be present, and as there is congestion of all the parts concerned in labor, the tissues are rendered more susceptible to any germs present.

Bacteriologists have discovered that normal blood is antagonistic to germ life, and is the sentinel, constantly on the alert to guard the citadel of life. Impoverished blood, which lacks some of its normal elements, or is surcharged with abnormal or foreign ones, furnishes a favorable nidus or culture-ground for the development of disease germs. Many of the ailments of childhood are due solely to imperfect action of the bowels, which we often see completely relieved by the administration and action of a purgative. And gynecologists tell us that coprostasis may give rise to pelvic troubles, such as metrorrhagia, dysmenorrhœa, etc. And in everyday practice we see cases of constipation where the liver has become clogged with the effete products of metabolism, and the retained nitrogenized material perhaps causing a rise of temperature, and other symptoms. Whether this is true or not from a pathological standpoint, it is certain that treatment based on this reasoning is often gratifying in the highest degree.

All obstetricians advise attention to the intestinal functions immediately after delivery, which is well, but thorough evacuation beforehand is better. In all operations of selection surgeons advise that the bowels be opened by purgatives or enemata as preparatory treatment. Thus we see the importance of attention to the condition of the bowels at this time, and if a physician is engaged to attend a case of labor he should give minute instructions in regard to this matter, so as to avoid constipation, and he should not fail also to administer a rectal injection after being called to the case.

What has been said, so far, relates to the employment of rectal injections to aid in securing the best possible condition in which the woman should pass into the puerperium. There is another use for which I wish to recommend them, and which, so far as I know, has never been suggested except by me, to accelerate and increase the expulsive character of the uterine contractions, render them more efficient, and thus expedite the delivery of the child.

Women, especially primipara, at the beginning of the second stage of labor, frequently hesitate to exert abdominal contraction, fearing that this will increase their suffering. This accessory force of the pains, the abdominal pressure, which acts upon the progress and expulsion of the child, may be regulated by the will, and in the effort to evacuate the bowels sets in voluntarily. In such cases a most excellent effect was observed after the injections, the ecbolic action showing itself in from twenty to thirty minutes, and nearly always lasting until the birth of the child; the contractions being regular, strong and free from any tetanic tendency. Sometimes spasmodic contractions of the external os, where the upper part of the uterus has not manifested power enough to overcome the resistance, the injections increase this power, the so-called spasm ceases and the os opens. Very often, prior to complete dilatation of the mouth of the womb, feeble contractions are observed, before or after the rupture of the membranes, and this defective uterine action may have characterized the labor from the beginning, or after hours of unproductive uterine action.

So that, besides the direct action in labor of the abdominal muscles and the diaphragm, brought about by the use of injections, the direct action of the uterus is increased and its expulsive efforts made more efficient. This action is due to a reflex irritation of the terminal nerves of the bowel, which is communicated to the connecting fibres of the ganglionic or spinal nerves, and thus conveyed to the uterus, it contracts reflexly.

Frankenhauser says stimulation of the hypogastric plexus causes contraction of the uterus. The fibres arise from the spinal cord, from the last dorsal and upper three or four lumbar nerves, run

into the sympathetic and then reach the hypogastric plexus.

Basch and Hoffman say that stimulation of the sacral and lumbar parts of the cord causes powerful uterine movement. As the parturition centre and the centre (Budge's) controlling the act of defacation are situated in the same part of the cord, in close proximity, and during labor the reflex activity of the spinal cord undergoes augmentation and the irritability of the uterus is increased, it is not unreasonable to suppose that rectal injections of a saline solution may stimulate uterine action. Laying aside theories in regard to the matter, and after an extended use of them and observation of their action, I am convinced that it is a clinical fact.

Another advantage and use: In exceptional and occasional cases of postpartum hemorrhage transfusion of saline solutions are practiced to aid in a mechanical way and even to excite the circulation. By the administration of rectal injections of a saline solution this necessity, if not prevented, is anticipated. Because a considerable amount of it is absorbed, as is evidenced by the thirst experienced, and this, together with the fluid imbibed, fulfills the indications for transfusion.

In regard to the method of administering rectal injections very little need be said, for most of the gentlemen present are familiar with the procedure. The solution I have been accustomed to use, as stated in the outset, is chloride of sodium (common salt) from one to two ounces to the quart of water. The temperature of the water should be about 98° to 100°. Though I have had splendid results from cold water, the warm water is usually more acceptable to the patient.

Place warm rubber sheet under the patient to protect the bed, and put her on the left side with the knees flexed. It is necessary that the fluid be introduced slowly, the operator stopping for a time whenever the patient feels contraction coming on, and a cloth should be pressed against the rectum to assist in retaining the water. If the bowel is only gradually distended, two pints or more may be introduced before reflex action is excited. During this contraction the water is prevented from passing off by the voluntary efforts of the woman, together with the descent and impinging of the womb against the rectum, and then travels in an upward direction, that is, antiperistalsis is brought about, which empties the rectum and fills the colon. As soon as the pain passes off the injecting process is resumed until the return of another pain. Often a considerable amount of water may thus be injected, insuring a thorough evacuation of not only the rectum, but the entire colon, together with the stimulating effect upon uterine action by sympathetic reflex action.

When labor is too far advanced to permit the woman to use the commode, the bed-pan can be placed under her. To sum up:

1. Rectal injections are indicated in labor to remove a mechanical obstacle to the progress of labor.
2. To prevent absorption of excretory matters into the blood.
3. To prevent local contamination of fecal matter and germs.
4. To anticipate the necessity for transfusion of salines in cases of hemorrhage.
5. They may be used as a co-efficient in increasing uterine action and accelerating delivery.

Making a Coward.

A dusky nurse, loving, devoted, but ignorant and overcome by her fervid imagination and terror of the supernatural, sat beside the cradle of her charge, and, enhancing her narrative by awe-struck tone and marvellous facial expression, whispered of a headless lady who rode a white horse every night. Precisely at twelve she might be seen cantering along the lonely road past the cemetery. She herself had seen her. Once, returning from church alone, late, she had heard the horse's hoof-beats, and had fled, not daring to look back.

The tender young nerves ached with terror, the small body shrank beneath the bed-covers, and there was born a life-long horror of the dark. From that hour in the nursery, life was invested with an indefinable fear of chance, destiny, the supernatural. Cowards are made, not born, and not always made by conscience; at least young cowards are not.—*Lippincott's.*

CURRENT LITERATURE CONDENSED.

The Influence of Removal of the Ovaries on Osteo-Malacia.[1]

Believing that it is a "now ascertained fact" that patients suffering from osteo-malacia may be cured by castration, the changes taking place in a healthy animal after castration were studied. After removal of the ovaries the quantity of phosphoric anhydride excreted was greatly diminished for a considerable time, the nitrogen remaining as before.

The diminution of phosphates began about the seventh day and lasted three or four months. It was supposed to be due to lessened pouring into the blood of a secretion from the ovaries. This unknown secretion seems to facilitate the oxidation of organic phosphorous compounds, which supply the material for bone formation. If this assumption were correct removal of the ovaries would result in the retention of a larger proportion of phosphorus and a greater accumulation of earthy phosphates until the skeleton resumed its normal hardness.

In bitches in which the removal of the ovaries had been followed by a lessened excretion of phosphorus, the subcutaneous injection of a glycerine extract of ovaries increased the phosphorus elimination, and a larger injection proportionally increased it. In support of the theory that the sexual glands moderate the size of the skeleton, all giants who have been examined by anatomists have had atrophied testicles, and the eunuch choristers of the Sixtine Chapel all had remarkably well developed skeletons.

A Case of Uræmic Bullous Dermatitis.[2]

A domestic, aged nineteen years, was seen in June, 1895, complaining of pains in the legs and feet, general swelling of the lower limbs and a skin disease. Her condition of semi-stupor prevented her from giving her history. On three occasions she had been laid up with general swelling of the body and had been in bed four weeks on that account when the skin disease appeared. For some weeks there had been vaginal discharge and some pain about the vulva, chiefly when walking. The eruption began in the feet with intense pain and rapidly spread over the body. There was a foul odor; she looked ill and pallid and complained of pain in the legs and feet. She was concerned about her condition, but at times became incoherent and almost unconscious. She lay so as to avoid pressure on the heels. Her lips were dry, tongue coated and fissured, and gums were sore. All the cutaneous surface was affected, that on the feet worst, but the arms and hands were also affected, and in both cases the lesions were less intense as the trunk was approached.

The feet were swollen with hyperextended toes, the right great toe having a grooved sore on its dorsal surface. The soles of the feet, particularly at the heels and balls of the toes, were covered with large, painful blisters, filled with a turbid, offensive liquid, and causing an offensive odor. Elsewhere the eruption consisted of clusters of tough vesicles placed on areas of inflamed skin.

At this time only a few drachms of turbid urine could be obtained, and this contained albumen, in the proportion of eleven grammes per litre, epithelial (bladder and vaginal) cells, a few casts and some small, round cells, probably blood discs. Temperature was 103°; pulse 112; respiration 28. She was given lig. morph. hydrochlor mxxv, and ordered a saline mixture and a milk diet. Lead lotion was applied to the feet only.

About one month before admission several discharging sores appeared on the vulva, the labia becoming so swollen that walking became difficult. Soon after this, and continuing for fourteen days, the urine was bright red in color and urination was painful. Three weeks before admission the rash began in the feet and spread over the body; the feet began to swell a week later and intense

[1] Professor Curatula, *Medical Press and Circular*, January 8, 1896.

[2] Alfred G. Barrs, M.D., F.R.C.P., *The British Journal of Dermatology*, January, 1896.

general pain, with almost unbearable headache, accompanied it, preventing sleep and resulting in delirium. For more than a week vomiting was constant. Vision was unaffected. In 1893 she had a severe attack of chicken-pox; in 1894 dropsy, lasting six months. Three days after admission she was not so well; the temperature was 99°; pulse 108; respiration 24, and distinctly of the "air-hunger" type. Her answers were incoherent, and after being roused, she would subside into semi-lethargy. The submaxillary glands were swollen and tender, but none of the lymphatic glands were affected. There was well-marked, double optic neuritis with considerable effusion, extending on the left side to the yellow spot. A few small hemorrhages were seen round each disc. The patient died two days later, and at the autopsy the kidneys were found typical examples of mottled chronic parenchymatous nephritis.

Two Curious Cases.[3]

About eighteen months ago I saw a man who stated that twenty-seven years previous he had gone to stool and instead of paper used a plant called "dog's fennel" or "corn chamomile," growing in great abundance about the place. Three days later there began an unbearable itching about the anus, followed by a papulous eruption which spread over the body. I found neither hands, feet, face nor neck at all involved, but nearly all the rest of the skin was more or less inflamed. Places the size of a five-cent piece were thickly scattered over the entire body, considerably raised, scabby in some places, raw and bleeding in others from the constant scratching. At times it would largely disappear and suddenly return with renewed energy, and at all times accompanied by the most intense itching. His general health was good, and he was the father of several healthy children. I am still undecided as to the diagnosis, but think the trouble a form of eczema. Being in the country, some distance from a drugstore, I decided to try something I had with me; so, to relieve the itching I made an ointment of cocaine, using twenty grains to the ounce of lard, and directed that it be rubbed on one thigh, once daily, until I could see whether absorption of the drug would cause annoyance. I found that two applications during the twenty-four hours made to one half the body at a time caused no inconvenience. I never ventured to cover more surface than that at one sitting. The itching stopped almost immediately, and in three weeks the patient thought himself cured and stopped treatment. About three weeks later the trouble returned with increased severity, and I resumed the ointment and gave also a one to one-thousand bichloride solution, which was applied with brisk rubbing and followed by the ointment. I alternated between Donovan's and Fowler's solutions, giving eight drops of one or the other after meals. The patient is now, eighteen months after the time I first saw him, a well man.

[3]George Woodson Scott, M. D., *Virginia Medical Monthly*, January, 1896.

A colored man consulted me, giving the following history: "About three years ago I noticed some enlargement on each side above the testicles, accompanied by some pain. As the growth increased, the pain did, also, until it became almost unbearable. About the same time I lost my 'courage,' and since that time have been unable to have connection." On the right side was found a hard body situated in the pampiniform plexus. On the left side, apparently a perfectly developed testicle, with spermatic cord and membrane intact. I called the other members of the dispensary staff to examine the case, and the majority of those present thought the growth on the left side a testicle but could not account for the one on the right. I thought the growth of a cancerous nature, but could come to no positive conclusion. There was no hernia, hydrocele, varicocele, and no tenderness on pressure. Pain had entirely ceased, the penis was shriveled and becoming smaller, and treatment had no effect on the power of erection.

A crusty bachelor says, "A woman keeps secret what she does not know." It would be well if some men would follow her example.—*Ram's Horn.*

1853–1896

THE MEDICAL AND SURGICAL REPORTER

ISSUED EVERY SATURDAY

THE BUTLER PUBLISHING COMPANY, Publishers

Editor and Manager
HAROLD H. KYNETT, A.M., M.D.

Associate Business Manager
WM. H. BURR, M.D.

Editorial and Publication Offices, 1026 Arch Street, Philadelphia, Pa.
P. O. BOX 843

Editorial Staff:
A. L. BENEDICT, M.D. W. A. NEWMAN DORLAND, M.D. SAMUEL M. WILSON, M.D.

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COMMUNICATIONS for the Editor, and books for review, should be addressed to the Managing Editor of the MEDICAL AND SURGICAL REPORTER, 1026 Arch Street, Philadelphia.
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PHILADELPHIA, SATURDAY, FEBRUARY 15, 1896.

EDITORIAL.

PROPRIETY VERSUS DECENCY.

THE REPORTER notes that in New York a certain society of women—presumably of the new kind, though with some very old-fashioned and disreputable notions—is endeavoring to secure State legislation providing that only married physicians be employed as assistants in insane asylums where women are confined. It trusts that the good sense of legislators will check the effort to enact such a bill. Prudishness rests on a substratum of nastiness, and the present movement deserves the hearty condemnation of the medical profession as of all clean-minded men and women, for a variety of reasons the most cogent of which is reserved for the close of the discussion.

We need barely allude to the general objections that apply to class legislation. A law which places a premium on any particular social and domestic status is more liable to produce evil than is one which is merely prohibitory and which serves only to curtail the freedom of the individual. If there is one institution of human society more than another, which ought to be absolutely free from commercial and "prudential" influences and which should be placed on a pedestal of the purest sentiment, it is that of marriage. By sentiment is not meant an ill-considered passion which ignores the possibilities and probabilities of future happiness, but that calm conviction of mutual affection and compatibil-

ity which must be the source of all true marital blessedness. The man, woman, or organization that advocates marriage as a benefit in itself, on hygienic, social, or moral grounds, may be correct from the cold-blooded view of the statistician; but such one is guilty of what amounts to crime, if the attempt be made to bring particular individuals together into an artificial, and therefore inevitably wretched, life of enforced intimacy.

There are many reasons why the class at which the proposed legislation is aimed, should not be hampered with domestic burdens. Institutional service is for most physicians an episode rather than a life-work. Few can be content with an indefinite continuance of such practice; of this few, only a small minority will have the energy to withstand the torpor which threatens the activity of every salaried resident in hospital or asylum. No young man should be compelled or encouraged to assume financial obligations which may fetter him to a life in which he will not be contented, or which does not bid fair to develop his greatest capacities for usefulness. Neither is it right by such legislation as is proposed, to require some women to choose between residence in an insane asylum and separation from their husbands. If any law bearing on such a subject is to be passed, it would be to the best interests of the greatest number of those concerned, at least of those who can be considered as rational beings, to require that the staff of insane asylums should be recruited from the unmarried.

The resolution also shows itself rotten at the core, in attempting to perpetuate the old and false conception that a married man has a greater right to intrude on the privacy of the opposite sex than has one not married. There are plenty of modest and virtuous bachelors; and there are too many husbands who take advantage of their married state to pander to depraved sexual instincts. All things considered, we believe that the young, unmarried man generally has higher ideals of honor and virtue than has the one whose idols have been shattered by experience with this faulty world. The question whether a man after marriage will be more or less pure-minded than before, will, it seems to us, depend largely on whether his own wife has his love and has retained his sincere respect, or whether—as may well happen without gross violation of the marriage vows—she has lost his love and forfeited her claim to his respect and devotion.

Finally, and most emphatically, THE REPORTER resents the implication that the intimacy between physician and patient, involving, perhaps, personal exposure or such conversation as would be improper under ordinary circumstances, requires any other justification than the necessities of professional attendance. Granting that the physician is an honorable man—as the great majority are—whatever transpires between himself and his patient is right because it is a matter of professional service and of humanity, and not because he is married, or is advanced in years, or is lacking in virility. Unfortunately, there are too many women who seem to conclude that, because the professional relation justifies the violation of the ordinary rules of social intercourse, it also excuses vulgar talk and indecency of manner. Indeed, many physicians consider it an open question whether our own sex is not the more modest of the two. Truly it requires the influence of many good and noble women to efface the sickening disgust impressed by one who invites vaginal examination as a sort of pardonable seduction, and who discloses prurience of mind to the man who essays to relieve bodily complaints.

ABSTRACTS.

MENTAL AND NERVOUS ELEMENT IN DISEASE.*

T. S. CLOUSTON, M.D., F.R.C.P.E., EDINBURGH.

I would desire to lay down and to enforce a principle that is not sufficiently, often not at all, considered in practical medicine and surgery. Founded on a physiological basis, it is of the highest practical importance. The principle is that the brain cortex, and especially the mental cortex, has such a position in the economy that it has to be reckoned with, more or less, as a factor for good or evil in all diseases of every organ, in all operations, and in all injuries. Physiologically the cortex is the great regulator of all functions, the ever-active controller of every organ, and the ultimate court of appeal in every organic disturbance. Every organ and every function is represented in the cortex, and so represented that they may be brought into the right relationship and harmony with each other, and so all may be converted into a vital unity through it. Life and mind are the two factors of that organic unity that constitute a real animal organism. The mental cortex of man is the apex of the evolutionary pyramid whose base is composed of the swarming myriads of bacilli and other monocellular germs which we now see to be almost all-pervading in Nature. It seems as if it had been the teleological aim of all evolution from the beginning. In it every other organ and function finds its organic end. In histological structure—so far as we yet know this—it far exceeds all other organs in complexity.

We do not need to hypnotize a patient to show that the mental centers in the cortex have the power of directly influencing physiological function and tissue nutrition. We talk and laugh and weep, we blush and shiver, we hunger and sweat, we digest and defecate all through the brain cortex. Not one of these physiological acts but can be instantly arrested by a mental act. Every one of them may through morbid cortical action become excessive or diseased. In mental disease, which means cortical disease, every one of these functions is commonly enough affected. The evidence that the brain cortex regulates absorption, secretion, vascular tone, and the anabolic and katabolic processes in the cells of the tissues may now be regarded as complete. Sores in many melancholic persons will not heal. The gland and the lung tissues in idiots and dements are unable to resist the attacks of the tubercle bacilli, so that two-thirds of our idiots and one-third of our worst dements die of tuberculous affections. It seems as if certain persons who are predisposed to special diseases have, as their great protective and prophylactic against them, a sound and well-working mind and brain cortex. When well in mind, they are sound in body. When disturbed in mind, they fall victims to their diathesis. I have no doubt myself that this is the strongest of all the forces from within that preserve health and protect from disease. It is now generally recognized that death takes place with most men, not because disease is overmastering, but because the resistive power against it at the time is lessened. For the healing as well as the prevention of disease, a sound cortex and a cheerful and a buoyant mind are all-important.

Mental therapeutics are, fortunately, had resource to far more now than of old. The exhilarating and nutrition-stimulating effects on health of pleasant social intercourse, change of scene, of beautiful landscapes, of the summer sea shining in the sunshine, are now universally recognized. What tonic and promoter of convalescence is equal to the "merry heart" which the wise man says heals like a medicine? If we fully

*Inaugural Address Delivered before the Royal Medical Society, Edinburgh.

accept and apply the sound principle that the brain cortex and mind constitute the central resisting energy against the occurrence of disease and one of the great forces that make for its cure, we thus get an explanation of many facts that cannot be explained on any localizing theory. Such a conception explains to some extent the extraordinary differences in the action of the same remedy in different persons, and in the same person under different conditions. All febrile conditions are strongly influenced by the mental and general cortical state of the patient. The vasomotor and the special thermal cerebral centers in the cortex have the power of raising the body temperature, without any sepsis, by electrical or mechanical irritation. Claude Bernard long ago came to the conclusion that "fever ought to be regarded as a phenomenon purely nervous. We may, in short, produce all the disorders of the organic functions which mark its course by acting on the nervous system and upon it alone." I would point out that Bernard's expression "nervous" must be held to include the greatest of all the functions of the nervous centers, the mental, and it is in accordance with clinical fact that mind may, through the brain of course, set up or stay a fever. The temperature in acute mental conditions not uncommonly runs up to 103° or 104° without sepsis, from over-cortical action alone.

Every physician, and I think most surgeons of any experience, know the immense value in the diagnosis of disease or injury of what can be seen in the patient's face, or eye, or attitude, or movements. Beyond any doubt there may be a "gastric" or a "renal" look, and there may be a "cardiac" or "pulmonary" look in a man's face. It will be seen that almost all these outward signs arise through the brain cortex being acted on by the diseased organs, this action being reflected in the face. In some respects the influence of the brain cortex on existing diseases in any organ or tissue and in warding off disease is measured by the amount of its nerve supply. It seems as if any tissue might effectually resist the assaults of its enemies if it had nerve influence enough from the brain cortex.

The nervous and mental element in disease is a universal and constant fact, but it prevails in different cases to a different extent. I could relate remarkable cases, from my own experience and out of the books, of functional disease being brought on and being cured by mental impressions only; of functions being suspended and altered from the same cause—nay, of actual organic lesions being directly caused and cured by mental impressions, as when blisters are caused by suggestion during hypnotic conditions. Constipation has been cured by doses of medicine containing no laxative, but with dogmatic assurances that a stool will follow in an hour. Warts have been "charmed" away; scurvy among sailors has been cured by the prospect of a naval fight; gouty swellings have disappeared when "Mad dog," or "Fire" was cried out suddenly to the sufferers. All these things have happened, but they occur only rarely; while some influence or other for good or evil is taking place, in some degree or way, from the patient's brain cortex and mind in every case of ordinary disease that you will have to treat.

If one desired to adduce one of the strongest illustrations of the influence of the cerebral cortex and mind on diseases, one would take the differences between day and night in nearly all disorders. We know that at night, and especially during sleep, the brain cortex is in a totally different state from its condition during the day, and the mind is then practically in abeyance. What is the result on function and disease? Do not all febrile affections become aggravated at night? Are not all mental affections then at their worst? Do not all pulmonary diseases then cause most pain and distress? Do not all the worst exacerbations of the neuroses of sensibility then occur? Do not the worst and most intractable of the convulsive disorders then come on? And is not night the time when the vital forces sink so low that mankind mostly die in the early hours of the morning? It is during the night that hallucinations as well as fears are most apt to appear. Macbeth's fears and fancies cover the whole psychology of night. Every man is conscious of having within him the same lessened power of judgment, and lowered emotions at night as

compared with day, and this lowered feeling means lowered resistive power against disease, and lessened recuperative energy.

If mind and brain so powerfully affect the conditions of disease, one naturally turns to them in looking for means of cure. And beyond all question we can often get effectual help there. Half the diseases that kill, as I have already said, do so because there is no sufficient power in the organism to resist them. The physiological commonly passes into the pathological, because the nerve energy is below par. To check many diseased conditions we cannot employ better therapeutics than to stimulate the cortex and strengthen the mental energy. To this end the first thing a good doctor does is to inspire confidence in his patient. Hope and a calm cheerfulness are often the best general aids to healthy metabolism. We know that a joyful emotion will at once fill the cortical capillaries. It is a true cerebral stimulant. To explain all those mental and nervous effects on nutrition, on function, and on disease, we must not forget that it is gradually being demonstrated, even in our present state of histological knowledge, that we have a sufficient apparatus in the brain cortex and its peripheral connections. It is not a vague question of "mind acting on body," of imagination producing physical effects. The highest mental centers can be demonstrated to have abundant and direct connections with the lower motor and trophic centers. All the centers can now be proved to have strands of fibers passing from the one to the other, and every center can be proved to act on its organ, and to be reacted on in return.

Year by year the number of deaths returned as caused by nervous diseases is increasing. The nervous and mental element will have to be more and more considered in the future in his work by the physician and surgeon, in its prophylactic, etiological, and therapeutic aspects.—*Brit. Med. Jour.*; *Pub. Opin.*

INFANT IMAGINATION.

The child learns to look for hidden lessons. He can do this because he is himself a romancer, a player of make-believe, a poet.

He assures you with earnest glowing glances that his pink and blue morning-glories are lovely ladies; the winds that set the dead leaves scurrying down the road-side are little horses galloping away with them; the brown acorn-cups are boats; a tub of water by the well-side is a sunny blue sea; the song in the bird's throat is an imprisoned spirit. With friendly sympathy he bends over the lady-bugs, whispering, "Run home, run home, your house is on fire," and stands by the garden listening to the busy song of the solemn-eyed grasshoppers. He is a myth-builder also; the skies are blue, the wind is soft; he laughs and stretches out wondering, worshipping hands to the Spirit who sends them. The world grows brown and bitter, and from his safe shelter by the fireside he hears the shriek of the wind. Again he is glad and thanks the power that shelters him. He places himself and his idealized world under the sway of that mysterious power.

There are no materialists, no agnostics, no atheists, among the little ones. The child is a worshipper. He needs but to be told whom to worship. A solitary child whose early lessons have been of heaven and its beauties has lain hour by hour upon a clover-clad hillside gazing into the cloud-banks high above him, seeing wondrous things—houses, men, and angels whose wide-sweeping wings waft them into the uppermost heavens. He has waited, listened, in an ecstasy of joy, for a glimpse of the heavens about to be opened.—*Lippincott's.*

MAMMA: "Don't imagine you're sick, Reggie, or you'll never get well."

REGGIE: "All right, mamma; then I'll play off well, and go skating just to stop my sickness."

THE RATIONAL USE OF COCAINE IN SURGERY.*

CLAUDE A. DUNDORE, M. D.,† PHILADELPHIA, PA.

The opinion of the profession, as to the employment of cocaine in surgical practice, has undergone a great change during the past three or four years, and this reaction is not surprising when we consider the many dire results which have followed the indiscriminate use of the drug.

After its local anæsthetic action was discovered, the advantages which it has over general anæsthetics in many surgical procedures, were plainly evident, and its utility was fully appreciated; as a result, it was used without regard to quantity or the physical condition of the patient, and as if it were as harmless and devoid of systemic effects as pure water. In the course of a short time we began to read accounts of dangerous symptoms, and even deaths following its use; these reports increasing in frequency until it was almost impossible to peruse a journal without finding the head-line, "Dangerous Effects of Cocaine."

The views of the profession now began to change, and papers were published claiming that the systemic effect of cocaine was irregular, and that it could not be depended upon, and being therefore unreliable and dangerous, it should be used only with the greatest caution, if at all.

During the past few years its employment has gradually decreased until, today, many surgeons have such a profound dread of it that they refuse to use it in any case whatever.

Cocaine in surgery is a great boon; its great advantages over the general anæsthetics, which it can so often displace, cannot be over-estimated; it has its dangers, naturally, as has many other active agents which we daily employ, and would not do without, on that account.

We would not refuse to administer ether when necessary, although its use is fraught with danger and demands unceasing vigil from the most experienced persons. We do not underrate its ill effects and, therefore, use it indiscriminately and carelessly; caution, judgment and experience govern its administration. Previous to etherization, the patient's history is elicited, his physical condition is taken into consideration and every precaution is observed to insure him against accident.

The day has come when we should use cocaine with the same care and watchfulness, and while acknowledging its dangers we should guard against them by the means which experience has taught us to employ: as long as it is used without regard to quantity, the site of injection or the condition of the patient, we are bound to have untoward results.

Of over two hundred cases of dangerous symptoms and deaths following the injection of this agent, reports of which I have collected from surgical literature, almost one-half received too large a dose; a few were debilitated; in regard to the rest, I do not know whether they were examined physically before the injection, whether they occupied a recumbent position, whether the solution of cocaine was freshly prepared or not; in fact I do not know, in the slightest degree, whether any care was taken to prevent ill results; therefore, these reports cannot be relied upon as showing the dangers of administering cocaine, and they should not debar any conscientious surgeon from employing it with judgment.

Another fact I would mention, every physiological effect of the drug is not necessarily a serious one; in both hospital and private practice I have used cocaine, in many cases of every description, without death or *dangerous* symptoms; I use the italics advisedly. I have seen dilated pupils, accelerated cardiac action, pallor, perspiration and some slight evidences of mental exhilaration, but these are no more to be regarded as danger signs than are the

* *Codex Medicus*, December, 1895.

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flushed face, heavy breathing, and delirious muttering of an etherized patient; they are effects which are always present to a greater or less degree, according to the size of the dose and the susceptibility of the patient.

Some people are naturally more susceptible to its action than others, but our maximum dose must not be large enough to endanger the life of the most susceptible individual.

The first, and by far the greatest precaution to be taken, before the hypodermatic injection, is the preliminary physical examination; this should be made with the utmost thoroughness; for to slight it in the least degree may be to permit the occurrence of alarming symptoms, and perhaps the death of the patient, to say nothing of the harrowing effect produced on the brain of the operator. Panas and Magitot state[1] that "cocaine should not be employed in patients suffering from chronic affections of the respiratory passages, or in those of well-marked neurotic diathesis." Reclus says,[2] "it is contra-indicated in brain lesions of long standing, in severe pulmonary cases, in neurasthenia and in epilepsy."

Experience has proved that if the patient is suffering with organic disease of the brain, heart, lungs or kidneys, or any confirmed neurotic disorder, injection of the drug must not be attempted.

A decided nervous temperament is, to my mind, a greater contra-indication to its use than any other condition, with the exception of organic cardiac disease; and it is in cases of this class that we so soon notice physiological effects, even when only moderate doses have been employed. I may state here that Reclus[3] is skeptical about these cases which have been reported of intolerance, for doses of a small fraction of a grain, and questions whether sometimes nervous symptoms, arising from emotional causes, have not been attributed to cocaine.

As to age: if the physical examination shows the patient to be healthy, the mere fact of being advanced in years does not preclude the use of the drug. Wyeth[4] does not regard it as applicable to children of less than ten or twelve years, although Hunter Maguire[5] thinks children bear it better than adults.

The use of cocaine in a considerable number of children, some being as young as three years, without noticeable systemic effects, leads me to believe that it is tolerated fully as well by children as by adults.

The patient should be placed in a recumbent position, with the head low, and he should not be allowed to rise for at least fifteen minutes after the cocaine has entered the general circulation; as it enters at once, when no constriction is used above the site of injection, the patient may be permitted to assume an upright position about fifteen minutes after the injection, or as soon afterward as the operator has finished; when constriction is employed, the patient must be kept in a recumbent position for fifteen minutes after all constriction is removed. By adhering to this method, symptoms of faintness, pallor and vertigo are prevented after the upright position is assumed.

Where it is possible to use constriction, as in operations on the arms, legs, fingers, toes and penis, it should never be omitted; an Esmarch tourniquet or a piece of rubber tubing is to be used, according to the part to be constricted.

After the operation, the method of removing the tourniquet, as described by Barton,[6] should be employed; the tourniquet is loosened and immediately tightened, so that but a small portion of the cocaine, contained in the isolated part, enters the general circulation; this is repeated at intervals of a few minutes until the cocaine has probably all entered the circulation in this way, and is disposed of; in this manner quite large amounts may be used without producing any ill effects. This procedure proves an additional safe-guard, inasmuch as a considerable portion of the cocaine is washed away by the hemorrhage, if the ligation of the vessels is delayed until after the tourniquet is removed, which should always be done. Of the salts of cocaine the hydrochlorate is mostly used, although the phenate has been used to some extent during the past two years. Von Oepele says[7] of the phenate, "it is more persistent in its effects and less toxic than any other cocaine salts, being less soluble in the water of the tissues." Kyle states[8] that "as it coagulates albumin, it localizes its own action, pre-

venting any extensive absorption of cocaine."

It is antiseptic and needs no addition to the solution to impart to it this quality, but as to its physiological action, I have not been able to discern any difference between it and the hydrochlorate.

It is desirable to use a freshly prepared solution for each case, as decomposition taken place rapidly, and is not prevented perfectly even by the addition of an antiseptic; distilled water, only, should be used for making solutions, to which may be added either phenic acid, salicylic acid or boric acid, about two grains to the ounce. The dose, in cases where constriction cannot be employed, should never exceed ¾ of a grain; after a quarter of an hour has elapsed, if the anæsthetic effect is insufficient to render the conclusion of the operation painless, an additional injection of half the first named quantity may be given; for operations about the head, face and neck, ⅓ of a grain must never be exceeded, and this should not be followed by a second injection. When constriction is used the dose may be considerably increased, varying according to the character of the operation and the vascularity of the site of injection; when the operation is of such a character as to be followed by little or no hemorrhage, the dose should be one grain, and, if the length of the operation requires it, half this quantity may be again used. When there will be considerable hemorrhage after the tourniquet is totally removed, thus getting rid of a large quantity of cocaine, we may use 1½ grains to be followed after the lapse of fifteen minutes, if absolutely necessary, by a half-grain.

The quantities above given should never be increased, and as it is very seldom necessary to administer the second injection, we can insure safety to a greater degree by omitting it. It is rarely necessary to use a stronger solution than two per cent., and by using this strength it is evident that we have a greater quantity of solution to a given quantity of cocaine, than if a stronger solution were used, and we are therefore able to anæsthetize a larger area of tissue; furthermore, as cocaine is taken up more slowly by the circulation when a weak solution is employed, we are less apt to have any decided systemic effect.

Thirty-five minims, which represent about ¾ grain, are sufficient for almost any operation, unless it be very prolonged.

Pernice [9] and also other writers have stated that cocaine has no anæsthetic action on inflamed tissues; Reclus was the first, I believe, to deny this statement, and he is undoubtedly correct when he claims that while it does not act so promptly, it still has decided anæsthetic effects.

The milder systemic effects of the drug, which may or may not be present, according to the susceptibility of the patient, and are not necessarily alarming, are, dilated pupils, accelerated heart action, palor, perspiration, vertigo and slight mental exhilaration. The symptoms which follow an excessive dose and which may be cause for grave apprehension, are, delirium, convulsions and opisthotonos.

A fatal dose arrests the heart in diastole, and also arrests the action of the muscles of respiration. The principal antagonistic agents which have been used in cases of cocaine poisoning are, "amyl nitrite or nitro-glycerin, strychnin, caffein, digitalis, ether and ammonia; if the expectation of Stickler, of Orange, New Jersey, is realized, we will command an antidote more reliable than any in the above list. He claims [10] that opium is a perfect antagonist to cocaine and has verified his opinion, to a great extent, by observations on numerous human beings, pigeons and dogs.

SUMMARY.

1. The use of cocaine in surgery should not be abandoned because its irrational employment has produced deleterious results.

2. Always make a thorough physical examination of the patient before injecting the drug.

3. It should not be used in cases showing organic disease of the brain, heart, lungs or kidneys, or in persons of a neurotic diathesis.

4. Children bear it fully as well as adults.

5. The patient should always be placed in a recumbent position, prior to its employment.

6. Constriction should be used, when-

ever possible, to limit the action of the drug to the desired area.

7. Use a freshly prepared solution for each case.

8. Distilled water is to be employed, to which phenic, salicylic or boric acid is to be added.

9. A two per cent., solution has a better effect and is safer than stronger solutions.

10. Never inject a larger quantity than 1⅓ grains when no constriction is used.

11. About the head, face and neck ⅓ grain should never be exceeded.

12. When constriction is possible, the dose may be as large as two grains.

13. Every slight physiological effect is not necessarily to be taken as cause for alarm.

14. Cocain *does* have effect on inflamed tissues.

15. In case alarming symptoms threaten, use amyl nitrite, strychnin, digitalis, ether or ammonia.

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ART AND EYESIGHT.

Lucien Howe, M. D., in the *Popular Science Monthly* for August, writes:—When we examine into the subject we find that the vision of artists is, as a rule, more imperfect than that of other persons. Where this is not a natural defect, artists find it convenient or necessary in their work to make their vision purposely imperfect, and in consequence do not place on canvas what the eye usually sees. Hence a discrepancy between Nature, as seen by the ordinary observer, and its alleged representation by some artists. The chief imperfection in the vision to which I refer is astigmatism, although either with that, or independently of it, there is usually with artists excessive contraction of the muscle used in focusing the eye—the so-called ciliary muscle. Technically astigmatism might be described as an asymmetry of the eye in which the radius of curvature in one meridian is greater or less than the radius of curvature in another. As the globe is compressed above and below by the upper and lower lids, it is to a certain extent flattened. This is the usual form of astigmatism, or astigmatism with the rule, as it is called. Other causes tend to make the axes of these two curvatures oblique to each other, or may change their position in various ways, which need not be considered here.

Nearly everyone is astigmatic. One series of observations made by Dr. Roosa of 200 eyes, whose owners supposed them to be perfect, and which were apparently perfectly normal, showed that only about one per cent. were, beyond question, absolutely perfect, and my own investigation in the same direction would fully corroborate this. If, therefore, a variation from the normal type is so frequent, it is but natural to suppose that artists should have at least their share of astigmatism. But the fact is that among artists astigmatism is not only more frequent, but also that it exists, on the average, in a higher degree, probably, than among any other class of persons. We can understand the reason for this if for a moment we observe an artist at his work. Having

arranged on his palette a variety of pigments, he stands before the easel and applies them to the canvas, but at intervals steps back some few feet, partly closes his eyes, pressing the lids together, and at the same time tips his head from one side to the other, the reason for which we will consider later. Now, if the eyes of persons with ordinary occupations are changed by the pressure of the lids, it is but natural to infer that the same result would follow even in a greater degree with persons whose occupation is such as to cause them to practice to an unusual degree this habit of lid pressure upon the cornea.

Professor Liebreich, in a communication to the Royal Institution in 1863, says, in speaking of Turner, "Till the year 1830 all is normal. In 1831 a change in the coloring becomes for the first time perceptible, which gives to the works of Turner a peculiar character not found in any other master. Optically this is caused by an increased intensity of the diffused light proceeding from the most illuminated parts of the landscape. . . From the year 1833 this diffusion of light becomes more and more vertical. It gradually increases during the following years. At first it can only be perceived by a careful examination of the pictures, but from the year 1839 the regular vertical streaks become apparent to every one. . . . It is a generally received opinion that Turner adopted a peculiar manner, that he exaggerated it more and more, and that his last works are the result of a deranged intellect. I am convinced of the incorrectness—I might almost say of the injustice—of this opinion. . . . According to my opinion, his manner is exclusively the result of a change in the eyes, which developed itself during the last 20 years of his life. In consequence of it, the aspect of Nature gradually changed for him, while he continued in an unconscious, I might almost say in a naïve, manner to reproduce what he saw. . . ." There can be no question but that astigmatism even in a slight degree materially affects what the artist sees, and if it is true that he draws what he sees, does this not mean that his drawing tends to be proportionately faulty? Another disadvantage of astigmatism to the artists is that lines really parallel appear to converge or diverge, when distorted by the blurring which astigmatism can produce.

It is worth while to note in passing a significant motion of the artist in tipping his head from side to side, as he stands off to criticise his work. I am inclined to think he does this instinctively, in order to see better the errors in drawing caused by his own astigmatism. Moreover, the critic does the same. The more closely we observe actions called "instinctive," the more frequently do we find they have an underlying cause. There is another imperfection of vision, more frequently artificial and temporary than due to any structural change. This is imperfect focusing. To understand this, let us for a second time observe the artist before his easel. If he is painting a bunch of flowers, with a white rose near the center, and if he wishes this rose to stand out in strong relief, he focuses his eyes naturally and normally upon it, and reproduces on the canvas the same clearly defined, well-focused flower which he sees. To the other flowers of the cluster he does not care to give the same prominence, and sketches them with less distinctness, or else focuses his eyes purposely for a point in front of the bouquet or behind it, thus blurring the colored flowers and purposely transferring to the canvas an ill-defined image of them.

A few practical conclusions may be drawn from our study of art and eyesight. These are briefly: (1) As far as the artist is concerned, if he wishes to avoid increasing astigmatism, it is necessary for him to abstain from this habit of making lid-pressure on the cornea, the resulting astigmatism being of no advantage, but always a disadvantage. (2) If he wishes to render himself relatively near-sighted, or, as he would state it, throw his eye out of focus, it is better to wear at his work a pair of convex glasses. (3) It is an undoubted advantage to every artist to ascertain the degree in which his eyes vary from the normal standard. (4) As the corollary of the last proposition it should be said that the observer, in order to see a picture to the best advantage, must adjust his vision to that of the artist who produced it. Most of us do this instinctively. Not only do

we select the best point of view from which to observe a picture, but we recede from the painting until the lights and colors blend in just the right degree. In addition to that, many instinctively pinch the eyes together, producing thus a momentary astigmatism, such as the artist had produced in his own eye, and find the picture thus apparently improved.

A most useful appliance for viewing pictures is the so-called stenopaic slit. This is merely a slit one or two millimeters in width in a card or thin plate of brass. If he wishes to look at a painting done by an artist whose vision is normal, or nearly so, the observer turns the slit around to correspond with the meridian of his own best vision. If, however, he looks at a picture in which it is desirable to have overlapping of the retinal images—at one, where the colors must be mixed in the eye, for example—it is necessary to rotate the slit to another position, usually at right angles to the first, and with this a canvas which before showed too clearly the blotches of color now becomes blended into a much more perfect whole. Thus, by adjusting our own personal equation of eyesight to that of the artist, we literally obtain his point of view.—*Public Opinion.*

SOCIETY REPORTS.

ALLEGHENY COUNTY MEDICAL SOCIETY.

[*December 17, 1895.*]

Should Small-pox Cases from Contiguous Towns be Received Into the Municipal Hospital?

DR. EUGENE WASDIN.

I wish to say a few words this evening upon a matter which has come under my observation during the last few days. It has been my duty as a surgeon of the United States to ask a number of questions regarding cases of small-pox in Knoxville. In pursuit of information I have found a condition of affairs anomalous, if not startling. I think that the Allegheny County Medical Society must be the court of last resort or appeal for the people of this city in sanitary matters, and I therefore bring it before you this evening. This ought to be and is the society before which all these questions should be taken, and the interest of one of our members, Dr. Le Moyne, in matters sanitary, rather gives him the lead individually.

On last Thursday, December 12th, a physician of Knoxville was called to see a sick man. Thursday, Friday and Saturday were exhausted in endeavoring to make a diagnosis. Sunday the diagnosis was said to be small-pox, and the family and house were quarantined, but notwithstanding this fact it is said that friends of the family were coming and going constantly. I do not make this statement in criticism of any physician, or any official, but wish to state the fact to the society. When I was informed of the nature of the case I at once approached the authorities of Pittsburgh, and was told that the man would not and could not be taken to the municipal pest-house. Here you have a case of a dread disease, small-pox, within one and a-quarter miles of the court-house, in the immediate neighborhood of 40,000 people, and within easy reach of 540,000. The electric cars make Knoxville almost the heart of the city. The patient has not been removed from the house in which the disease commenced. He is now there. I brought the matter to the attention of the city official and was told that it would be a bad precedent to care for a man from an outside borough in a municipal institution, although it was admitted that to do so would be in the direct line of protection to the residents of Pittsburgh. I was also informed that the Knoxville authorities had requested permission to bring him to the city pest-house, but the request had been refused. This certainly is a question for this society to take action upon. I do not know exactly your sentiments in the matter, but I offer the following resolution:

Resolved, That it is the sense of this Allegheny County Medical Society that it would be most conservative of the public health if the Department of Public Safety would make arrangements to receive patients ill with small-pox for isolation in the Municipal Hospital, from any contiguous borough of this city.

DR. J. M. DUFF: The president of the Knoxville Board of Health offered to pay the city authorities anything that they might be asked for the reception and care of this patient.

DR. WASDIN: It was not a matter of money, it was a matter of precedent in the bringing a man from an outside borough to a city institution. I ask here, should precedent stand in the way of public health and protection?

DR. FRANK LE MOYNE: I wish to offer an amendment to the effect that the clause "All contagious diseases requiring isolation" should be substituted for "small-pox," so as to make the resolution more comprehensive and not limited to small-pox. There are other diseases, equally if not more dangerous.

DR. W. F. KNOX: I would suggest that the phrase "any contiguous borough" should be changed so as to read "any contiguous city or borough," as there are incorporated cities within the county.

DR. J. D. THOMAS: So far as the sentiment is concerned, I am in favor of the resolution, but I am free to say that I do not think it would be of any use to have such a resolution passed before this society. You know how iron-bound the city officials are, especially when it does not suit them to break their fetters. Pittsburgh appropriates money for the conduct of its municipal affairs. It does not appropriate money for the benefit of outside districts. I do not think any notice would be taken of this resolution so far as the city authorities are concerned. I think the proper place to take this matter is before the State Board of Health, which has jurisdiction over the entire State. As regards small-pox, I think this about the least feared to-day of all the contagious diseases. I am not sure but what a little epidemic of this kind is a good thing to have occasionally. People become dormant. They do not take any interest in sanitary matters, and a small epidemic of a disease like small-pox, which is so dreaded by the ordinary layman, would serve to arouse a deeper interest in hygienic matters and lead to the passage of better sanitary laws. How many times has this society, and its members, prayed and besought the city fathers for better sanitary regulations in regard to the water supply, and other vital matters, and without avail? Therefore, I say that a small epidemic of small-pox might do our city law-makers a large amount of good. I think the county society is powerless in this matter. It will be a waste of time and a waste of effort with nothing to be gained by the passage of this resolution before this society. In sentiment I am in favor of it; practically, it is of no use.

DR. EUGENE WASDIN: I do not know enough of local affairs to be able to understand the condition as described by Dr. Thomas. Surely some arrangements could be made by which this patient might be taken to the city pest-house and the borough from which he is taken be charged with all expense of transportation and treatment. This patient's friends offered money, but it would not be received. There is no reason why in a county of this size there should not be a county pest-house or arrangements entered into between the city and county authorities for the care of county patients in the municipal pest-house. It seems to me that an arrangement of this kind could be made and the question solved without recourse to the State Board of Health.

DR. J. D. THOMAS: Will the president and gentleman kindly allow me to relate a little incident which has a bearing on this subject?

When the South Side was not a part of the city, but only a borough contiguous to two or three other boroughs, some twenty-three years ago, we had a small-pox epidemic, and the various boroughs on that side of the river united in building a pest-house or small-pox hospital, to which all the boroughs interested might send patients. This hospital was erected in the borough of Ormsby. The physicians of the boroughs offered their services without charge, as they always do under such circumstances. The hospital was a very substantial two-story building, having four large rooms on each floor. Everything was conveniently arranged for the care of the patients, but before any could be sent there the village of Ormsby got out an injunction to prevent the bringing of any small-pox patient across Twenty-seventh street into that borough. That injunction was made permanent. I mention this incident to show the gentlemen some of the difficulties in the way of promoting sanitary matters in this community. Now I venture to say if the city authorities were to permit the bringing of small-pox patients from contiguous boroughs into this city that some one would get out an injunction to restrain this bringing into the municipality of small-pox patients, and I believe that such an injunction would be made permanent. I argue only from precedent and from what I know of the administration of city and county affairs.

DR. FRANK LE MOYNE: I think this a very interesting subject. Although I agree with the remarks of Dr. Thomas in some respects, I do not entirely agree with his deductions. I claim that the Allegheny County Medical Society should be the instructor of the people on sanitary matters. We should express and promulgate our sentiments and convictions in language which could not be misunderstood. If our earnest protest shall be disregarded by the municipal authorities, they must assume the responsibility.

I think the fact should be taken into consideration that a change in public sentiment has taken place during the past twenty years on this and kindred subjects. I believe that an arrangement can be entered into by which small-pox patients from contiguous boroughs within the county may be received into the

municipal hospital, which has a possible capacity for 300 patients—it would be a very severe epidemic which would produce that number. There is no good reason why the arrangement referred to should not be made and the various boroughs charged an appropriate fee for the accommodation provided by the municipal hospitals.

(Upon vote the resolution, with amendments, was passed.)

SECTION ON OPHTHALMOLOGY, COLLEGE OF PHYSICIANS OF PHILADELPHIA.

A stated meeting of the Section on Ophthalmology was held in the Lower Hall, College of Physicians, on 19th November, 1895,* Dr. Wm. F. Norris, chairman, presiding. Present: Drs. Geo. Fales Baker, J. M. Da Costa, Cleeman, Eshner, Fenton, Friebis, Goodman, J. H. Grove, Hansell, Jackson, Leidy, Longaker, Wm. F. Norris, Oliver, Ring, John M. Taylor, and Zentmayer, Fellows of the College, and Drs. Bromley, Cassel, Mellor, Moorhead, Schneideman, and S. Lewis Zeigler as guests.

DR. EDWARD JACKSON exhibited a **Binocular Lens** for examination of the eye by oblique illumination. The speaker stated that he had been experimenting with such lenses for more than two years, and had at last obtained one made from a single piece of glass which gave a true stereoscopic image with little or no distortion.

DR. S. LEWIS ZIEGLER showed a case of **Congenital Dislocation of the Crystalline Lens** in a boy thirteen years old. Dr. Jackson reported a similar instance in which one lens had escaped into the anterior chamber, producing symptoms of secondary glaucoma; these symptoms disappeared immediately upon removal of the lens.

DR. CHARLES A. OLIVER gave a brief history of a case of a young girl seventeen years of age, in which a **lens was successfully removed by a wire loop through an inferior section**, the operation being performed by Dr. Norris. He also called attention to a traumatic case in which he had successfully removed a lens, restoring the patient's vision to almost full acuity, and mentioned that he fixed the lens into position so as not to fall back into the posterior chamber by spitting it through the corneal membrane by means of a narrow needle. In this case, the section was made upward and the lens was removed by a loop without the loss of any vitreous, in spite of a widely dilated pupil.

DR. GEORGE FRIEBIS related the subsequent history of a **double cataract extraction in a ninety year-old patient** in which the visual result in the left eye equaled almost full acuity and that of the right eye nearly one-half of normal. He stated that he considered these results remarkable in view of the fact that the optic discs were pallid and that the retinal vessels were contracted.

DR. HOWARD F. HANSELL cited four interesting **cases of traumatism.** The first case was that of a man who was struck with a broken bottle, cutting the left eyelid and producing a wound of one centimeter's length involving the corneo-scleral border and the upper ciliary regions. The iris was prolapsed, the lens was dislocated under the conjunctiva, and there was an extensive loss of vitreous with profuse hemorrhage. The lens was removed, and under antiseptic dressings and a pressure bandage, the wound healed and the prolapsed portion of the iris become glazed over. There were vitreous synechia cicatrized in the corneal wound. Ciliary tenderness, diminished tension, and absolute blindness were deemed of sufficient moment to enucleate the globe, which was done by a modified method from that recently proposed by Sukers, the four recti muscles being sutured together by a piece of catgut, which was passed through each muscle before division, thus including their distal ends and producing a bunch of tissue which would permit of more regular and extensive movement of an artificial eye. Contrary to expectation, no foreign body could be found in the organ.

The second case was that of a boy who, whilst exploding a dynamite cap, had a piece enter the right eyeball in the lower inner quadrant, making a clean cut through the conjunctiva and sclerotic in the ciliary region. The piece of copper lodged in the ciliary body at a point opposite its entrance, where it could be readily seen through the uninjured lens with the ophthalmoscope after the pupil had been dilated with atropine. There were hemorrhagic extravasations into the anterior and vitreous chamber and into the sub-conjunctival tissue. Vision for distance was scarcely disturbed. In spite of increase of irritation signs, the parents positively refused to permit any attempt to extract the foreign substance.

The third case was that of an Italian who received a wound in the right eye by the premature explosion of a dynamite cartridge. The accident occurred while the patient was engaged in blasting, about a month before he was seen. At the time of the first examination an irregular, sharply outlined scar could be recognized about the center of the cornea. The anterior chamber was shallow, the iris was greatly contracted and the pupil was filled with exudation. There was no light-perception, and

*Report received February 5, 1896.—ED.

intra-ocular tension equaled minus 2. The eyeball was injected and painful. Two days later it was enucleated, revealing the presence of a piece of copper which was found attached to the posterior capsule of the lens. The lens itself had been transformed into a semi-fluid, viscid mass.

The fourth case was seen within an hour after the patient, a machinist, had had a tool with a sharp cutting edge knocked out of his hand against his eye, making a clean cut through the cornea, the iris, and the lens. A large portion of the vitreous had escaped. The iris, which was torn from nearly the whole circumference of its peripheral attachment and twisted on itself, protruded from the wound and rested on the prolapsed vitreous. The protruding portions of both the iris and vitreous were excised. The eye was washed with a bichloride solution and an antiseptic pressure bandage was applied.

In the discussion, DR. JACKSON referred to Leber's paper, in which the virulence of particles of copper in the eye was so prominently brought forth.

DR. G. ORAM RING spoke of a case in a fourteen-year-old boy, which he had seen twenty-four hours after the accident. Six millimeters back of the corneo-scleral junction there was a wound, through which a probe could be passed and a metallic substance could be felt. The foreign body was removed and found to be a piece of gun-cap. The wound was penciled with a 1 to 500 strength of bichloride of mercury, and ice compresses were employed. The case went on to full recovery with a vision of $\frac{20}{30}$. He cited another case in a colored man whom he saw one hour after a cut in the cornea had been received. The iris was adherent, there was rapid swelling of the lens, and in thirty-six hours panophthalmitis was so pronounced that enucleation was rendered difficult. A piece of steel, broken from a hammer, was found lodged in the ciliary region.

DR. FRIEBIS detailed a brief account of a case that he had seen five years previously, in which a seventeen-year-old lad had his right eyeball so ruptured through a large corneo-scleral wound by a piece of hot iron, that nearly all of the vitreous humor had escaped and the folds of the ciliary processes were exposed to view. Upon suturing the sclera and the cornea, the latter membrane immediately regained its luster. In two months' time the interior of the eye had cleared itself sufficiently to allow the patient a vision of $\frac{20}{oc.}$, this being obtained with the correction of about a diopter and a half of astigmatism. One year ago vision had risen to $\frac{15}{xx}$, with a correcting lens of + S. 0.50 D. ⊃ + C. 1. D. ax. 60°. Tension was slightly minus. At present there is a normal acuity of vision with + C. 0.50 D. ax. 90°. The remarkable part of the case consists in the fact that the lens was not disturbed in any way in spite of the severe traumatism.

DR. JACKSON cited a case of **cataract extraction in advanced diabetes** that he had recently seen in Denver, Colorado, in which the immediate results were excellent up to the fifth day, when the patient complained that she had sudden loss of vision with severe pain. There was œdema of the globe with slight hyperemia of the anterior segment. No trace of infection could be detected. Both œdema and pain increased. The iris became inflamed and pus appeared in the anterior chamber. A week later, the patient complained of pain in the arm, and a diagnosis of thrombosis of the upper extremity was made. The patient died of cerebral thrombosis. The ocular symptoms were supposed to be dependent upon thrombosis of the chorioidal veins.

DR. OLIVER exhibited a **series of water-color sketches** made for him by Miss Margaretta Washington. They embraced several drawings of the ophthalmoscopic appearances of intense neuro-retinitis in supposed cerebral and cerebellar tumors; degeneration changes in the retina and optic nerve from descending neuritis in a case of basilar meningitis; retinal hemorrhage and blood extravasations into the vitreous in a case of supposed embolism of the central retinal artery; macular changes in a case of lightning stroke; the appearance of the optic nerve-head and surrounding retina in a case of hereditary retrobulbar neuritis; and a remarkable retinal vessel distribution in a case of coloboma of the iris and chorioid.

The meeting then went into executive session. Upon motion, adjourned.

CHARLES A. OLIVER,
Clerk of Section.

LIBRARY TABLE.

THE DISEASES OF CHILDREN—MEDICAL AND SURGICAL. By Henry Ashby, M. D., Lond., F. R. C. P., and G. A. Wright, B. A., M. B., Oxon., F. R. C. S., Eng. Third edition—edited for American students by Wm. Perry Northrup, A. M., M. D., New York: Longmans, Green & Co. 1896.

There is, perhaps, no single-volume treatise upon diseases of children which has met with more general appreciation on the part of the medical profession than has this by Ashby & Wright.

It has already reached its third edition, which in itself is a reasonable proof of its popularity. It maintains the same general tone of excellence as the previous editions, but beside this, numerous improvements have been

made. Thus, among the more conspicuous features we note that the sections upon Infant Feeding, Anæmia, and Chronic Heart Disease, have been almost entirely re-written; while not inconsiderable additions have been made to the Surgical part of the work.

The present American edition, which is the second, is edited as before, by Dr. Wm. Perry Northrup, of Bellevue Hospital fame.

In preparing the book for the American reader he has left the body of the work intact, the main changes being in the direction of therapeutics. Thus the formulæ, which comprise part of the Appendix, have been re-arranged to conform with the United States Pharmacopœia. The only other American changes worthy of mention, are some additions to the surgical portions, by T. Halsted Myers, of New York, and these are embodied in the Appendix.

In looking over the book it becomes difficult to state just which are the strongest features, but the chapter on Infant Feeding strikes one's attention, and is quite in accord with our own notions upon this most important subject.

As a whole, it may be said that the great strength of the work lies in the fact that it is written conjointly by a physician and a surgeon, which prevents it from assuming a one-sided aspect. W. H. P.

THE PATHOLOGY AND SURGICAL TREATMENT OF TUMORS. By N. Senn, M. D., Ph. D., LL.D., Professor of Practice of Surgery and Clinical Surgery, Rush Medical College; Professor of Surgery, Chicago Polyclinic; Attending Surgeon to Presbyterian Hospital; Surgeon-in-Chief St. Joseph's Hospital, Chicago. Illustrated by 515 Engravings, including full-page colored plates. Philadelphia: W. B. Saunders, 925 Walnut Street. 1895. For sale by Subscription only. Price, $6.00 Cloth; $7.00 Half Morocco.

There are few subjects of greater practical interest to the practitioner than is that of tumors, and yet there doubtless are a greater number of physicians who would have to consult their libraries in the management of these maladies than in any other class of cases of equal importance. As the author states, "Books specially devoted to this subject are few;" therefore a comprehensive treatise on the subject of tumors is of great interest and value at this time. There is no doubt that many physicians have a very indistinct idea of what constitutes a tumor, apart from simple enlargement. The author draws a very sharp line between true tumors, inflammatory swellings and retention cysts, and deals in this volume chiefly with tumors. A chapter on retention cysts is appended to round out the work. The author adopts the theory that all true tumors arise from a matrix of embryonal cells, either congenital or post-natal, and bases his classification on this theory. The evidence of the microbic origin of tumors not being considered convincing, this theory is given little consideration.

The first part of the work deals with such general matters as the origin, morphology, anatomy, pathology, clinical aspects, etc., of tumors, and is intended more especially for the student. Following is a section on classification of tumors. Each class of tumors is treated in a separate chapter, with the histology, symptoms, diagnosis and topography, etc., as well as a description of the operative treatment for their removal in suitable cases. More than one hundred of the illustrations are original.

This book will prove a welcome addition to the libraries of all physicians, and more particularly those making a specialty of surgery. To the student it will present a clear outline of that branch of pathology which seems so inextricable in the laboratory. The character of the paper, the print, and the illustrations afford nothing for criticism. In short, the work is up to the standard established by its well-known publisher. W. E. P.

PERISCOPE.

MEDICINE.

Results of Tobacco Smoking.

Dr. J. C. Mulhall, of St. Louis, read a paper on the cigarette habit before the American Laryngological Association recently, which developed an interesting discussion (*New York Medical Journal*, December 14, 1895). See MEDICAL AND SURGICAL REPORTER, Vol. LXXIII, No. 24, 1895.

Dr. Ingals said it was most fortunate that such an old cigarette smoker was alive to tell this tale, and was willing to tell in just what respect cigarette smoking was objectionable. It was well that people should understand the difference in the effect produced by smoking cigars and by smoking cigarettes. He was

sorry the author should have made the grave mistake of intimating that tobacco smoking did no harm. He thought that all the members had seen chronic pharyngitis and irritable conditions of the fauces which were apparently due to smoking. Personally, he had seen many whose nervous systems had been seriously affected by indulgence in tobacco. The author had stated that the local effect was slight, and this was probably true in the majority of cases but not in the large minority.

Dr. Carl Seiler said that Dr. Ingals spoke without experience as a smoker, and hence he could hardly enlighten us much on this subject. The speaker said he was himself a smoker, and he had never seen a case in which any local effect had been produced by smoking, except in those Americans who did not know how to smoke, who were continually expectorating and thus producing an abnormal dryness of the pharyngeal mucous membrane. The smoke of a cigar or pipe, if not inhaled, remained in the mouth, a part which was covered with tessellated epithelium, and not with columnar epithelium.

Dr. Daly had begun smoking when seven or eight years of age, and had smoked ever since, for the most part, temperately. He always experienced a sense of great depression, except when he smoked after taking some stimulant or a hearty meal.

Dr. Langmaid had understood the reader of the paper to say that there was but little irritation of the pharynx and larynx as a result of cigarette smoking. He recalled a stalwart Irishman whom he had seen in his office. An examination of the throat had led him, in spite of the man's nationality, to express the opinion that the patient was not a smoker, and the man had admitted that such was the case. He had known this by the coloring of the mucous membrane of the pharynx and larynx. If this observation had been correct, and not merely a shrewd guess, it was evident that there was a decided local effect upon the mucous membrane. He thought that the female throat was ordinarily less hyperæmic than the male throat—at any rate, this was particularly noticeable in singers. During the past winter he had occasion to treat a physician with a very irritable throat. While the associated mental disturbance and other symptoms were not to be attributed to the use of tobacco, he had been forced to the conclusion, as had the patient also, that the smoking was responsible for most of the trouble. He could invariably tell from an examination of that man's throat when he had refrained from smoking for a few days.

From a large personal experience in the treatment of prominent singers, he had found that smoking exercised a potent influence on the voice. In his own case, he had learned that, in order to be in good voice, he must not smoke during the day if he was to sing that evening. Because one prominent singer could smoke and sing, this was no argument that others could do so. The best singers of to-day underwent a great deal of fatigue. He had in mind one singer with a magnificent voice, in whom he felt sure he could detect the effect of cigarette smoking. He had known another singer, an inveterate smoker, who had found it necessary to abstain as long as three weeks at a time from smoking, in order that he might be at his best for some great effort in singing. He would say that the bad effect on the pharyngeal mucous membrane was much less from cigarette smoking than from pipe smoking, for the reason that the smoke was not so hot. What he objected to in cigarette smoking was its destructive effect upon consecutive thought. The cigar smoker did not want to be narcotized; the cigarette smoker did want this.

Dr. Simpson related his personal experience with regard to smoking and its local effect upon the singing voice. The reader of the paper had spoken very pertinently when he had said that it was in the allied conditions that the local effect of smoking was increased. At one time he had given up smoking absolutely for eight years, and passed through what seemed to be similar to the experience of the opium smoker in his attempt to give up his habit. During this period when he was not smoking, his throat had been free from any discharge or uncomfortable sensation, and he had been able to use his voice with remarkable ease. After he had resumed smoking he had found it much more difficult to keep the singing voice in good order. The barytone did not suffer so much as the tenor voice did from smoking. He also felt that he could detect a smoker's throat by its appearance.

Dr. Newcomb thought there was a certain amount of habit about smoking, independently of the effect of the tobacco itself. Those who had looked into the literature of pharyngeal mycosis know that all writers alluded to the possible good effect of tobacco in that condition. He now had under his care a young Swedish woman of splendid physique, and without any bodily disturbance except a pharyngeal mycosis. She had been treated with the cautery, but without much benefit. She had then been lost sight of for a time, and on her return had been decidedly improved. She had finally admitted that during this time, on her own responsibility, she had been smoking Monopole cigarettes without inhaling the smoke. It seemed that in this case, at least, the smoking should be given a large share of the credit for her improvement.

Dr. Langmaid had once tried the use of solution of nicotine in a case of this kind, an with a most disastrous result. The application had been followed by immediate and severe syncope. He wished to warn against this, although it had been recommended.

Dr. Swain said that an interesting fact brought out by certain measurements taken in the colleges relative to the physical development of the students, had been that among tobacco smokers, as a class, there was a smaller chest expansion than among other students.—*New York Medical Journal*, December 14, 1895.